

FULWOOD URBAN DISTRICT COUNCIL.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year ending 31st. December, 1951.

PUBLIC HEALTH DEPARTMENT,
"LARCH HOUSE"
4, LYTHAM ROAD,
FULWOOD,
LANCS.

REPORT OF THE MEDICAL OFFICER OF HEALTH.

For the Year ending December, 1951.

To the Chairman and Members of the Urban District Council of Fulwood.

Mr. Chairman, Lady and Gentlemen,

I have the honour to present my Annual Report on the health of Fulwood for the year 1951. As in past years, it contains the vital statistics of the district many of them based upon material supplied by the Registrar General and some upon figures supplied by the County Public Health Department. From these sources the Mortality Rates for the various sections were estimated. The rest of the Report, the major portion, is an account of the work of the Public Health Department covering the period under review and it endeavours to present a picture of the department's work and the details of each section.

The year 1951 was a year of steady progress, and of further consolidation of measures which had been found to be of value in past years.

The National Health Service Act which since its inception had done so much to interrupt the work of the Preventive Services of local District Councils had shown signs of establishing a more settled line of policy without ceasing to place particular emphasis upon its remedial side rather than on the more logical side of the prevention of disease.

Those Authorities which had carried out in past years a vigorous policy of positive health and had achieved brilliant results in the production of a strong, healthy, virile population, especially amongst the younger ages, have expressed their regrets freely of the interruption which has taken place in that excellent work. Perhaps in future years a saner policy may emerge and the emphasis be transferred from pills, potions and plasters to prevention, protection, and positive health.

Unfortunately the policy of centralisation still continues, and the obtainment of information, formerly so freely available to the districts, has become increasingly difficult.

To attempt to produce a picture of the state of health of a district without all the details which are necessary to complete it, and which were formerly available, can only result in a somewhat distorted picture.

In last year's Report details were given of information which was no longer available to the districts and the position did not improve during 1951 but in certain instances deteriorated.

It is however gratifying to be able to report that the detailed information about cases of Tuberculosis has now reached its pre National Health Service Act level, and it is once again possible to have detailed knowledge of the whereabouts, progress and medical state of each patient. It is proposed in future years to establish a system in the area of this Authority whereby more exact knowledge will be available of the social background of each patient, and his financial position, in order that assistance can be rendered where it is urgently required. As further cases do arise amongst the patients' immediate contacts it is desirable to have accurate information about the state of health of these also.

Many of the facts about members of the population who are handicapped by age, by physical incapacity, or by mental deterioration are insufficiently known and it is considered that, in the future, information and tabulation on the lines suggested for patients suffering from Tuberculosis might yield results useful to both the community and the handicapped persons.

As in past years particular attention has been devoted to the purity of food, milk, ice cream, and foodstuffs generally all of which have had frequent inspections and tests. In general terms the position cannot be considered satisfactory. The handling, storage, and production of food leave much to be desired, but the shortages and rationing play a large part in this unsatisfactory state.

The methods of production of milk have definitely deteriorated under the new administrative controls, if efforts so feeble can be dignified by such a name. Even Graded Milks such as Tuberculin Tested, which had a high standing in public opinion, have definitely degenerated in their standards of bacterial purity. The position is rapidly approaching when to ensure a milk that is safe to drink, that confession of failure and counsel of weakness "Pasteurise it" will have to be applied to all milks graded or ungraded.

The control of the standards of cleanliness at the sites of production of milk should be returned forthwith to those local authorities which in past years have proved their capacity to undertake this task.

This would mean a complete alteration in the present administration or it could be done even more effectively by a delegation of powers.

Again it must be repeated that "The price of purity is eternal vigilance". That is true of all forms of food production, food handling, and food preparation.

The state of health of any community is influenced not only by its environment but also to some extent by weather conditions. As in the preceding year the section upon the meteorological conditions for the year have therefore again been included and for comparative purposes some of the figures of rainfall in the water collection area have been included.

Also included in the report is an interesting account by Mr. Elce (the Acting Surveyor) of the work carried out by the Council for the improvement of the living conditions and amenities of the community as a whole. Unfortunately the more favourable outlook upon the sewerage of the northern part of the district given in the 1950 Report has not eventuated but actually receded for the Government embargo upon financial expenditure was applied to this scheme and also to the making up of some roads in the same part of the district.

In spite of the wet year and these defects, which it had been hoped to rectify, the health of the district was satisfactory. Indeed the excessive rainfall was beneficial in so far that it diluted the overflow from the septic tanks in the streams in the north and prevented that fouling of the banks which usually occurred in dry seasons. Measles of a mild type caused a small epidemic — a continuation from that at the end of the previous year. Scarlet Fever showed an increased number of notifications but the disease itself was very mild and without after effects. Three cases of Paratyphoid occurred, again of a mild type and easily cured, but the sources of infection were not traced.

Attention must be drawn to the demand for houses, which still remained in excess of the number of houses which had been built or could be built in this district under the quota system. The provision of small, more easily worked houses for the ageing population would assist the solution by the release of family houses. As the housing in Fulwood has always been of a high standard with very few of a substandard type, the problem, except for shortages, has never been a pressing one.

The statistics supplied annually by the Registrar General were again of the fuller type similar to those of the previous year. The comparability factors for births and deaths have again been supplied thus enabling the figures of this district to be compared with those of other districts.

A slight increase in population was estimated, the death rate was lower and the birth rate slightly higher than in the previous year. The death rates from Tuberculosis and from Malignant Diseases were fractionally lower, there were no deaths from maternal causes and the Infantile Mortality rate was halved.

Physical Features of the Area.

The area covered by the Urban District is roughly oblong in shape, the long axis lying East and West. The height of the district above the datum line is 190 feet in the North East sloping downwards to 55 feet in the South East. Gentle rises and falls characterise the whole area.

Three streams,—Savick Brook, Sharoe Brook, and Eaves Brook, flow through the district from East to West. Eaves Brook forms the southern boundary of the area and separates the Urban District from the County Borough of Preston.

Geologically the area is part of the Lancashire Plain which is floored with red rocks of the Triassic age (Specimens of these rocks may be seen at the base of the cliffs at Blackpool). Superficial to the rocks there are three layers of Glacial Drift :— the Lower Boulder Clay, the Drift Sand, and the Upper Boulder Clay. The three layers vary in thickness in different parts of the district. In the North Eastern portion there are many bluffs composed entirely of Drift Sand with a covering of Upper Boulder Clay of varying thickness. Some of these bluffs have a core of clay and a surround of sand. All the bluffs rest upon a base of Lower Boulder Clay many feet thick. At the western side of the district the Upper Boulder Layer is 22 feet in thickness resting upon up to 30 feet of sand, with a varying layer of Lower Boulder Clay underneath. The Triassic Rock Layer is a little above the existing sea level but forms a gentle inclined plane rising to the Pennines and the Glacial Drift Layers upon it often reach 170 feet in depth.

The pebbles and Boulders found in the Drift Layers consist of Yoredale Grits, Limestone, Lake District Traps, Granites, Volcanic Ash brought mainly from the Lakeland Mountains by ice movement. Occasionally granite from Criffel may be found. Water bearing seams occur at the surface of the Lower Boulder Clay and on thin beds of clay in the Middle Drift.

Meteorological Characteristics of 1951.

Grateful acknowledgement must be expressed to Mr. Tuson, Chief Education Officer of Preston Corporation, and to Dr. Barocas, the Director of the Jeremiah Horrocks Observatory, Preston, for their report for 1951 from which many of the details of this section were extracted and Mr. Blossom and Mr. Parkinson of the County Institute of Agriculture, Hutton, for much useful information.

The year 1951, like its predecessor, was a wet year. The total rainfall was 45.25 inches — 7.80 inches over the annual average for the district and half an inch less than in 1950. Although rain fell on 220 days, which was 24 days more than the average, the amount of rainfall on any one day never exceeded 0.98 inch.

The periods of rainfall were not continuous. The first three months of the year were wet but the succeeding months had a fall less than average. October the driest month of the year with 1.62 inches of rain was succeeded by November and December — very wet months indeed, and December excelled itself with 8.64 inches, rather more than double its usual average.

The longest dry spell was from May 29th to June 8th.

The first eight months of the year yielded a daily mean temperature lower than the average but the last four months one higher than the average. November though wet showed a daily mean temperature 3.6°F higher than the average. 75.4°F was recorded on July 21st which was the highest temperature of the year, and on March 20th 23.8°F was the lowest. There were 1,321 hours of sunshine as compared with 1,238 in 1950.

Ground frost was present on 72 nights in the year. Snow fell on 16 days and hail on 17. On 11 days thunder was heard and on a similar number of days there were gales. On 86 days the visibility was reduced due to foggy conditions. There was dense fog on 2 days and thick fog on 7 days.

Winds from the South, South West and West usually considered moist winds blew on 33, 74, and 46 days respectively. Winds from the East and South East blew on 48 and 60 days. Winds from the dry quarters North, North West, and North East blew on 7, 32, and 27 days respectively. There were 38 days without wind. On 205 days the wind force was less than 12 miles per hour, on 98 days between 12 and 24 m.p.h. and on 24 between 25 and 38.

The table below gives the weather summary for the year :—

Month	Rainfall at Barnsfold	Rainfall inches	Number of rain days	Sunshine	Prevailing wind days
January	5.56	4.13	22	25.4	SW 9
February	4.00	2.59	22	42.2	SW 8
March	5.57	4.78	23	80.9	E 7
April	2.73	2.07	15	181.2	SW 6 NW 6
May	2.21	1.99	13	194.5	NE 11
June	1.78	1.94	11	225.6	SW 8
July	3.05	2.11	17	168.1	SW 11
August	5.13	4.64	22	134.3	SE 6 SW 6
September	3.84	2.81	17	107.6	SW 7 SE 7
October	2.42	1.62	7	92.0	SE 11
November	9.11	7.93	25	42.7	SE 6
December	10.88	8.64	26	26.9	SW 9
Totals	56.28	45.25	220	1361.4	

Statistics and Social Conditions of the Area.

Area in Acres	3,268
Population (Census 1931)	7,387
Registrar-General estimate of Population Mid-1951... ..	13,330
Number of Inhabited Houses (Census 1931)	1,501
Number of Inhabited Houses (Rate Book 1951)	3,676
Rateable Value	£88,955
Sum represented by a Penny Rate	£356

Social Conditions and Amenities of the District.

The district is almost entirely a residential one with wide streets and avenues, excellent housing, and through it runs from South to North the vital highway A.6. On the periphery of the area there are dairy farms and a small amount of cultivation. A steam laundry employs local labour and is the largest industrial concern in the district.

There are seven Churches in the area representing various denominations, and four of these possess church halls which are used for religious and social activities. Concerts, dances, dramatic entertainments and lectures are held in these halls throughout the year.

There are two branches of the County Council Library in the district, one sited in the Northern part and one in the South Eastern.

Recreation and sport are well catered for by a Golf Club, three Tennis Clubs, a Bowling Green (with additional greens sited at hotels) a Sports Club, and a Youth Centre with Sports sections.

In the two County Council Schools in the district there are many evening activities, and in one denominational residential school a successful band has been in existence for many years.

In addition there are many local organisations which provide lectures, debates and discussions upon affairs of national and local interest.

There are several Institutions in the area, some provide residential accommodation for the aged and others for the education of the rising generation.

There was no evidence of unemployment amongst the inhabitants of the district in 1951.

Vital Statistics.

Births.

Live Births :—										M.	F.	Total
Legitimate	...	...	...	...	...	...	...	...	...	96	72	168
Illegitimate	...	...	...	...	...	...	...	...	...	2	1	3
										98	73	171

Birth rate per 1,000 population—Crude, 12.8 Adjusted 14.9.

Still Births:—										M.	F.	Total
Legitimate	...	...	...	...	...	...	...	...	...	1	0	1
Illegitimate	...	...	...	...	...	...	...	...	...	—	—	—
										1	0	1

Rate per 1,000 total (live and still) births, 6.

Deaths.

M.	F.	Total
106	92	198

Death Rate per 1,000 estimated population—Crude, 14.9.

Adjusted, 12.8.

Comparability Factors :

For births—1.16.
For deaths—0.86.

Maternal Mortality.

Deaths from pregnancy, childbirth and abortion—Nil.
Mortality rate per 1,000 births (live and still)—Nil.

Infantile Mortality (death rate of infants under one year)—

All infants per 1,000 live births—18.
Legitimate infants per 1,000 legitimate live births—18
Illegitimate infants per 1,000 illegitimate live births—Nil.

Neo-Natal Mortality—

Deaths of infants under 4 weeks of age	...	...	...	...	...	2
Mortality rate per 1,000 live births	...	...	...	...	...	12

Other Mortalities—

Deaths from Cancer (all ages)	.....	...	...	...	...	20
Deaths from Pulmonary Tuberculosis	...	...	...	...	...	2
Death from Puerperal Causes	...	...	...	...	...	Nil
Deaths from Measles	...	...	...	...	...	Nil
Deaths from Whooping Cough	...	...	...	...	...	Nil
Deaths from Diarrhoea (under 2 years)	...	...	...	...	...	Nil

Table of Comparative Statistics

	Per 1,000 estimated population						Maternal Mortality Rate		Infantile Mortality
	Live birth-rate		Death-rate		Death-rate from respiratory tuberculosis	† Death rate from cancer	Per 1,000 live births	Per 1,000 total (live and still) births.	Rate of deaths under 1 year per 1,000 live births.
	Crude	Adjusted	Crude	Adjusted					
FULWOOD									
Mean of 5 years -									
1941-45 ...	13.6	*	15.0	*	0.38	-	3.67	3.55	43
1946-50 ...	13.9	*	15.3	*	0.43	-	1.18	1.15	43
Year - 1949	12.3	*	15.8	13.3	0.55	-	nil	nil	51
Year - 1950	12.7	14.1	15.6	13.6	0.18	2.05	nil	nil	36
Year - 1951	13.4	14.9	16.3	12.8	0.15	1.5	nil	nil	18
Increase or decrease in 1951 on - 5 years' average 1946-50	— .5	-	+ 1.0	-	— 0.28	-	nil	nil	— 25
Previous year	+ 0.7	+ 0.8	+ 0.7	— 0.8	— 0.03	— 0.5	nil	nil	— 18
County of Lancaster, 1951	14.62	14.91	13.86	14.14	0.26	1.96	N.A.	0.69	29
England and Wales, 1951	15.5	-	12.5	-	0.31	N.A.	N.A.	0.79	29.6

Comparability factors 1951 :- Births 1.16 ; Deaths 0.86

Population.

The population of Fulwood in the census of 1931 was 7,387. Included in this number were some 2,000 resident in Institutions. It is estimated that the number of residents in 1951 was approximately the same.

For 1951, the Registrar-General's estimate of population of this district was 13,330, an increase of 230 on that of 1950.

Deaths and Death Rates.

The tables below are corrected for outward and inward transfers. Both the crude and adjusted death rates were again below those of 1950. The crude and adjusted birth rates were slightly above those of the previous year.

An Analysis of the Causes of Death, 1951.

	M.	F.	Total
Heart Diseases—			
Coronary Disease, Angina	16	6	22
Hypertension with heart disease ...	5	5	10
Other heart disease	26	21	47
Diseases of the circulation	5	1	6
Vascular lesions of the nervous system ...	13	22	35
Malignant Diseases (all sites)	8	12	20
Bronchitis	4	4	8
Pneumonia	4	2	6
Influenza	5	5	10
Other respiratory diseases	2	—	2
Pulmonary Tuberculosis	2	—	2
Ulcer of Stomach and Duodenum	—	1	1
Gastritis, Enteritis and Diarrhoea	1	—	1
Diabetes	—	2	2
Nephritis and Nephrosis	1	1	2
Hyperplasia of Prostate	2	—	2
Congenital Malformations	2	—	2
Other infective and parasitic diseases ...	—	1	1
Other defined and ill-defined diseases ...	7	9	16
Motor vehicle accidents	2	—	2
All other accidents	1	—	1
Total	106	92	198

Deaths from Tuberculosis.

There were two deaths from the Pulmonary form of the disease, and none from the Non-Pulmonary types.

Deaths from Malignant Diseases.

The number of deaths from Cancer and other diseases of a malignant character was 20, a decrease of 7 upon that of the previous year. It was indicated in last year's report that the compilation of deaths from malignant disease had undergone a change and the previous figures were not comparable with the present ones.

Infantile Mortality.

The rate for 1951, was half of that for 1950, i.e. 18 as compared with 36. This present figure is much below that for Lancashire, and for England and Wales. This must be considered to be a matter for satisfaction. On such small figures it is easily possible for a considerable variation to arise. It would however, appear that the spade work of past years is now showing good results.

Infantile Deaths.

Under 1 year		M.	F.	Under 4 weeks	M.	F.
Legitimate	...	3	—		2	—
Illegitimate	...	—	—		—	—
		<hr/>	<hr/>		<hr/>	<hr/>
		3	—		2	—
		<hr/>	<hr/>		<hr/>	<hr/>

The causes of death were as follows:—

								M.	F.
Congenital Malformations	...	...	...	...	...	...	...	2	—
Congenital Heart	...	...	...	...	...	...	...	1	—
							Total ...	3	—

There was one male still birth.

General Provision of Health Services in the Area.

Medical Officer of Health:—G. G. Wray, M. D., Ch.B., D.P.H. (Not in general Practice).

OTHER PUBLIC APPOINTMENTS—

M.O.H. Walton-le-Dale, U.D.C.

Sanitary Inspector:—R. Graham, M.R.San.I., Nat. Dip.Agr. (Whole time.)

Certifying Factory Inspector:—Mr. A. Toulmin, Ribblesdale Place, Preston.

Laboratory Service.

The Government District Laboratory, sited in Preston Royal Infirmary, provided the technical assistance necessary for the examination of bacteriological and pathological specimens. It also carried out the bacteriological tests of milk, ice cream, water, faecal material, and blood submitted to it by the authority and issued reports upon these materials.

Under this arrangement the Local Authority is no longer responsible for the cost of examination, but is also no longer supplied with the results except when the specimens are sent in by the Authority.

Chemical analyses are usually carried out by the County Analyst.

Hospital Service.

Under the National Health Service Act all persons suffering from any form of indisposition are treated in the hospitals without cost to themselves.

The hospitals under the control of Regional Hospital Boards are administered locally by the Preston and District Hospital Management Committee, and are as follows:—

For General Diseases and Maternity—

Preston Royal Infirmary.
 Sharoe Green Hospital.
 Chorley Hospital.
 Eaves Lane Hospital, Chorley.

Annexes—

Lostock Hall Convalescent Hospital.
 Longsands Lane, Fulwood, Continuation Hospital for Orthopaedics.

For Infectious Disease and Tuberculosis—

Deepdale Road Isolation Hospital, Preston.
 Heath Charnock Hospital, Chorley.
 Chestnuts Sanatorium, Preston.
 Elswick Sanatorium.
 Elswick Small Pox Hospital.

MOUNT STREET HOSPITAL, PRESTON, FOR MEDICAL, SURGICAL AND MATERNITY CASES, IS NOT UNDER THE NATIONAL HEALTH SCHEME.

Malignant Diseases. A special section of Preston Royal Infirmary officered by personnel from the Christie Cancer Hospital, Manchester was used by patients from this district. X-ray, Radium, Isotopes, and other forms of treatment were available. Where necessary patients were admitted to the Christie Hospital for more extensive or more specialised treatment.

Ante-Natal Services. These clinics formerly provided at Preston Royal Infirmary and Sharoe Green Hospital by the hospitals and the County Council jointly are now provided by the Hospital Management Committee. No details were issued by the Hospitals to this Authority of the numbers of women who attended from this district but doubtless they were extensively used.

General Diseases.

The arrangements for the treatment of persons suffering from diseases or other disabilities in hospitals have been commented upon earlier in this report, but in the absence of accurate information from the hospitals about the use of these hospitals by inhabitants of this district it would be impossible to assess a morbidity rate for the district.

The Chief Officer of the local branch of the Ministry of National Insurance—Mr. Ambler—has, as last year, kindly supplied figures of the number of cases of sickness and accident preferring claims for each week in 1951. From these figures which covered Preston and its surrounding districts it has been possible to estimate statistics for Fulwood with a reasonable degree of accuracy. The figures supplied apply only to the insured population, do not include self employed persons of whom there are many in Fulwood, nor persons over or under the age of insurance.

As the average age of the inhabitants of Fulwood is higher than in many of the more industrialised areas for which the figures were compiled, complete accuracy would be very difficult for all these reasons.

The seasonal rises and falls are well shown.

Month.	Average number of new claims per week								Average total absentees each week	
January	90	...	405
February	44	...	198
March	30	...	135
April	23	...	103
May	20	...	90
June	18	...	81
July	17	...	77
August	18	...	81
September	21	...	95
October	26	...	117
November	25	...	113
December	22	...	99

As the Registrar General's quarterly return of sickness for the last quarter had not been received it has not been found possible to insert the table of illness and days of incapacity in each quarter of the year. Certain figures given, however, proved of interest particularly in the estimates of population. Over the age of 65, it was estimated that there were 4,813,000 persons—1,968,00 males and 2,845,00 females. There were 3,722,00 children under the age of five and 6,016,00 children of school age (5 to 15 years) with slightly more males in each group. The total estimated population was 44,008,000.

In the early months of the year Influenza and Respiratory diseases caused the largest number of cases of illness but these causes were much reduced in number in the later months of the year. There was a remarkable consistency throughout the year of the number of persons reporting ill with Rheumatism. The largest numbers were formed by those persons who reported with " Ill defined symptoms " and this class was consistently large in each quarter of the year."

SERVICES OF THE COUNTY COUNCIL IN THE AREA.

Child Welfare. The centre established in this district in 1944 by the County Council met weekly throughout the year at the Parochial Hall, Victoria Road. Although the number of babies attending increased, the number of attendances was less than in 1950.

	No. attending								Attendances made	
Children under one year of age	160	...	877
Children from one to two years	90	...	425
Children over two years	80	...	202
								<hr/> 330		<hr/> 1,504

The number of sessions held was 51.

In addition to the examinations made and the supervision at this centre, the County Council Health Visitor paid frequent visits to the homes to advise, to examine and to make arrangements for treatment where this was found necessary.

School Children. Routine medical inspections of the children were made in the schools, as well as more frequent visits and inspections made by the School Nurse.

For the purpose of following up the children for whom treatment was required, or where it was desirable to keep them under observation for a period, the School Nurse visited many homes.

It is regrettable to have to report that no clinic has yet been provided for this area, although it is required, and the nearest School Clinic is at Longridge, where there are facilities for the treatment of minor ailments, ophthalmic and dental conditions.

The Hospitals were used extensively, as in past years, for the treatment of School Children under the County Council Scheme.

A clinic for Speech Defects and Therapy has been established at Spring Bank, in Preston, by the County Council.

Tuberculosis. The County Council still provides the Tuberculosis Health Visitors and the buildings for the Dispensaries for the inspection, examination, and certain lines of treatment of sufferers from this disease. The Medical Staff is supplied by the Regional Hospital Board.

This division of control worked inefficiently for sometime after the change over, but the improvement evident towards the end of 1950 was continued in 1951, and this service approximated the general level of excellence which it formerly had under the County Council Administration.

Hospital and sanatorium accommodation were provided by the Regional Hospital Board.

Tuberculosis Notifications and Deaths.

1951

Age Period Years	New Cases				Deaths			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M	F	M	F	M	F	M	F
0—1	...	...	...	...	...	...	...	...
1—5	...	...	...	...	...	...	...	...
5—10	...	...	1	...	...	...	...	...
10—15	...	...	...	...	...	...	...	...
15—20	...	...	...	...	...	...	...	...
20—25	1	...	...	1	...	...	...	...
25—35	...	...	...	...	1	...	...	...
35—45	...	...	...	...	...	...	...	...
45—55	...	...	...	...	...	...	...	...
55—65	1	...	...	...	...	...	...	...
65 up	1	...	...	...	1	...	...	..
Totals	3	...	1	1	2	...	..	...
	3		2		2		Nil	

Tuberculosis Treatment.

Number of admissions to Hospital or Sanatorium—3.
 Number removed from Register as recovered—Nil.
 Number of deaths—2.
 Remaining on Register, December, 1951 (M. 24; F. 28)—52.

Ambulance Service.

This was one of the services delegated by the County Council to the Health Division, but in Fulwood the Ambulance Service belonging to Preston Corporation discharged the function by arrangement with the County Council. It appeared to work satisfactorily and all cases of sickness and accidents were carried to and from the hospitals. Sitting cases were conveyed in sitting case cars.

It had been intended to site an Ambulance Station in Fulwood but this has not eventuated. Vehicles from Penwortham station assisted in an emergency.

Domiciliary Nursing and Midwifery Service.

The same nurses undertake both these branches of nursing in this area and therefore act as District Nurse Midwives. Three of them are resident in the area.

Miss Margaret E. Johnson, S.R.N., S.C.M.

Miss Elizabeth Johnson, S.R.N., S.C.M., "Brynville", Cadley Causeway, Fulwood.
 Telephone : 86368.

Miss Slack, S.R.N., S.C.M., "Silver Howe Bungalow," Lightfoot Lane, Fulwood.
 Telephone : Broughton 176.

The number of maternity cases attended by them was 31, a reduction in numbers compared with 1950. It has been obvious for some time that expectant mothers have become hospital minded, not only to avoid the slight upset in the home which childbirth causes, but the financial advantage which the utilisation of a hospital bed ensures doubtless has its attraction.

Information about the number of cases nursed in the home and of the number of visits made by the nurses for this purpose could not be obtained from the Health Division but undoubtedly the service had been used though whether to the full extent possible can only be surmised.

Immunisation against Diphtheria.

This again was a delegated service to Health Division No. 4, and the Divisional Medical Officer has supplied the number of children immunised in 1951.

Number of children under school age—113.
 Number of children of school age—21,
 Number of children reinforced—145.

These figures show a small increase over those of 1950 of the number of children protected for the first time but a considerable reduction in the number of those children who received reinforcement doses.

Although in this district some children were still immunised privately, it would appear that the proportion of non-immunised children must be increasing. This may be due to casualness on the part of the parents or to lack of efficient propaganda but the re-appearance of Diphtheria amongst the children would be a tragedy after freedom from that dread disease for so many years.

Vaccination.

The Divisional Medical Officer supplied the following figures. The number of primary vaccinations performed 139, of which 133 were successful. The number of revaccinations 29, of which 28 were successful.

ENVIRONMENTAL SERVICES.

The Prevalence and Control of Infectious Disease

In the opening remarks of this report the question of Infectious Diseases was discussed. None of the outbreaks presented a problem of any consequence although the number of notifications exceeded that of the previous year by 54. Mention must be made that there were 20 cases of Pneumonia in persons over 45 and that in spite of Sulphonamides and Antibiotics eleven of these people died. Puerperal Pyrexia cases notified from the hospitals doubled in numbers but it would be difficult, without much more information, to comment upon this. Dysentery also produced increased figures, but adjacent districts had similar increases. One case of Ophthalmia Neonatorum was reported from hospital, quite uncommon nowadays.

The three cases of Paratyphoid, fortunately of a mild type and producing illness of short duration only, required very extensive investigations. The milk supplied and water were bacteriologically examined. All food supplies were traced and investigated. Specimens of blood, urine and faeces were examined bacteriologically not only of the patients three times but of all the contacts at least once. The source of infection was never accurately traced.

A similar procedure was adopted in the food poisoning case but of not quite so extensive character.

All cases of Infectious Disease were individually investigated and so far as possible the source of infection traced. This often required a quite considerable expenditure of time, which was increased where it was considered necessary to disinfect the house, bedding and clothing.

Communications by letter and telephone with adjacent Authorities concerning cases of Infectious Disease also occupied much time but must be considered essential if the control of outbreaks is to be adequate.

The tracing of contacts, notified from other authorities or by the Ministry, of cases of Infectious Diseases occurring in other areas also called for further expenditure of effort.

Twenty samples of various kinds in the enteric cases were taken and submitted to the Bacteriologist for examination.

It can be noted that only 2 of the 20 cases of Pneumonia were notified in this area.

Notifiable Diseases (other than Tuberculosis.)

Notifiable Diseases	Total Cases Notified												
	Total Cases All ages	Age Periods—Years									Total Deaths	Hospital	
		Under 1	1	3	5	10	15	25	45	65 up		Cases remvd. to Hospital	Death in Hospital
1951													
Scarlet Fever	19			1	5	11	1	1	...	...	...	12	...
Measles (excluding rubella)	83	6	21	25	26	2	...	3	...	...	...	...	...
Whooping Cough	20	1	4	1	13	..	..	1	...	...	...	..	...
Acute Pneumonia (Prim. & Infl'z'l)	2	...	...	...	...	...	...	...	2	...	11	...	...
Puerperal Pyrexia	10	...	...	...	...	...	8	2	...	...	...	10	...
Acute Poliomyelitis Paralytic	1	...	...	...	1	...	...	...	...	...	...	...	...
Paratyphoid	3	...	2	...	...	...	...	1	...	...	...	2	...
Dysentery	14	...	6	5	1	...	...	2	...	...	...	2	...
Food Poisoning	1	1	...	...	...	...	...	...	...	...	...	1	...
Pneumococcal Meningitis.....	1	1	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorium	1	1	...	...	...	...	...	...	...	...	...	1	...
TOTALS	155	10	34	36	52	3	9	9	2	11	28	Nil	

Inspection and Supervision of Food.

In the reports of previous years details were given of the efforts made to improve the purity of milk produced or retailed in this district. These efforts were continued in 1951 but the farm inspections, no longer the responsibility of the local sanitary authority, were not part of that work and it was doubtful under the new set up whether there were any routine visitations to the farms. The new organisation has failed not only to improve the old methods but has in fact not yet equalled them. Without further additions to the staff of the Ministry this important work must inevitably suffer.

The number of dairy farms in the district was 49 with somewhat less than 1,000 cows.

There were 10 dairymen, other than cowkeepers in the area and 21 of the producers retailed milk in the district. Eight other retailers with premises outside the area also delivered milk.

It was not necessary to visit any of the farms on account of Infectious Disease, 36 visits were made, however, to collect samples of milk. 50 visits were made to dairies for the same and other purposes.

The number of dealers' licences was as follows :—

Distributing T.T. Milk—29.
Distributing Pasteurised Milk—27.
Distributing Sterilised Milk—2.

The number of samples of unpasteurised milk whether produced or retailed in the district, taken for submission to tests for bacteriological purity was 152. Of these 110 were satisfactory and 42 unsatisfactory. This was a definite drop in the percentage of satisfactory samples as compared with the results of the previous five years. Sedimentation tests were made of 88 samples and of these 86 were satisfactory and 2 failed.

For the presence of the Tubercle Bacillus 113 samples were tested, and all of them were found to be Tubercle free.

The efficiency of the heat treatment of milks was tested in 47 samples and of these only one was found to be insufficiently heat treated. The Methylene Blue test of these samples showed that all were satisfactory bacteriologically.

Of the Accredited Milks 18 samples were taken and examined bacteriologically, and 12 were found satisfactory and 6 unsatisfactory. All were negative for Tubercle Bacillus.

The bacteriological purity of Tuberculin Tested milks was found on test to be very unsatisfactory and tests were repeatedly made, month after month, of the milks of those producers where sampling had shown them to be unsatisfactory. In some cases the results were worse than those of the raw Ungraded Milks. As the result of the criticisms of this state of affairs to the Ministry of Agriculture a meeting was held with one of their officials. Resulting from this discussion it became clear that this unsatisfactory position was caused by insufficient inspection, advice, and control of methods of production at the farms. Improper cleansing of the bottles was also a factor but that was part of the insufficiency of control at the farms.

This condition cannot be improved until the Local Authority is once more made responsible for the purity of milk production at the farms. This can be done by delegation from the Ministry to those authorities which have proved a capacity for dealing with the problem in past years or by a complete reversion of the present policy.

The following tables show the results for the last eight years in the different classes of milk:—

Undesignated Raw Milks.

Bacteriological Tests			Tests for Tubercle Bacillus		
Year.	No. of Samples.	Satisfactory.	Percentage Satisfactory.	No. of Samples.	T.B. Present.
1944	146	98	67	148	1
1945	122	86	70	116	4
1946	101	78	77	101	2
1947	165	130	79	128	3
1948	184	146	79	159	2
1949	185	157	85	140	3
1950	96	81	84	48	3
1951	88	75	85	34	Nil.

Accredited Milks.

Bacteriological Tests			Tests for Tubercle Bacillus		
Year.	No. of Samples.	Satisfactory.	Percentage Satisfactory.	No. of Samples.	T.B. Present.
1945	27	18	66	22	1
1946	4	3	75	4	Nil.
1947	43	34	79	38	2
1948	43	33	76	36	Nil.
1949	32	24	75	33	2
1950	36	26	72	26	1
1951	18	12	66	14	Nil.

Tuberculin Tested Milks.

Bacteriological Tests			Tests for Tubercle Bacillus		
Year.	No. of Samples.	Satisfactory.	Percentage Satisfactory.	No. of Samples.	T.B. Present.
1945	3	2	66	2	Nil.
1946	1	1	100	1	Nil.
1947	6	5	83	6	Nil.
1948	16	13	81	14	Nil.
1949	13	11	84	13	Nil.
1950	68	50	73	57	1
1951	94	71	75	65	Nil.

There will be found further details of the tests in Mr. Graham's report appended.

The one pasteurising plant in the district was not used in 1951.

The licences were issued as follows :—18 for Pasteurised milk, 20 for Tuberculin Tested milk, 9 supplementary licences for Pasteurised milk, 9 for Tuberculin Tested milk, and 2 for Sterilised milk.

Tuberculosis Order, 1938

All the 113 samples of milk examined for the presence of the Tubercle Bacillus were found to be negative for that germ so it was not necessary to take any action under this Order.

It was also not necessary to issue any instructions for the heat treatment of milk where such could be considered to carry infection to mankind.

Inspection and Supervision of Food.

In last year's report it was stated that a poster card was in course of preparation for issue to retail food shops. This dealt with the admission of animals to those shops and pointed out to customers that this was now an offence under the Bye-laws and that in the interest of the hygienic storage and handling of food animals should not be brought into food shops.

Many improvements were made to shops as the result of inspections and at one shop completely new lavatory accommodation was provided for the female assistants.

Meat and Other Foods.

The Slaughter-house was well conducted throughout the year. Notice of slaughter was given regularly and without fail. Each animal slaughtered was inspected fully and where organs or portions of meat were found to be unfit for human consumption, they were surrendered freely for condemnation. These inspections entailed much time but this must be considered well spent in the interest of the public. The owners of the slaughter-house were fully co-operative in this work.

Below is a record of horses slaughtered in the last seven years :—

1945—267
 1946—249
 1947—260
 1948—283
 1949—260
 1950—280
 1951—318

Shops.

Many of these were inspected at the request of the County Council under the Shops Act. Particular attention was devoted to those engaged in the sale of foods. One shop, kept by persons in the later years of life necessitated numerous visits to encourage the owners to reduce the amount of stock in the shop to workable proportions in order that cleansing of the premises could be carried out regularly.

Butchers' Shops.

Regular inspections were made to the nine shops in the district. The general standard of cleanliness was maintained.

Bakehouses.

There were 12 in the area. All were inspected regularly for cleanliness and to ensure that the products were being prepared under hygienic conditions. Items of minor defect were corrected on request and a reasonable standard was maintained.

Greengrocers' Shops.

Were regularly inspected. It was difficult, owing to the nature of the goods sold, always to preserve cleanliness but attempts were made to improve those shops where the general level was substandard.

Hawkers' Vehicles.

These were inspected regularly and on the whole they were satisfactory. Most of them were motor vehicles and of the covered type. The premises on which these vehicles were based were also inspected and many of these required frequent visits to preserve a reasonable standard of cleanliness.

Milk Carts and Vans.

The majority of these were motor. When samples of milk were taken the vehicles were also inspected at the same time. On the whole their condition was quite satisfactory.

Ice Cream.

In the earlier parts of this report mention was made of the continued efforts to ensure that the quality of ice cream sold in the district reached suitable standards of bacteriological purity. These efforts were in pursuance of the policy established in previous years. The problem of the week-end retailers especially those coming in from other areas was still difficult. The laboratory to which samples were sent for examination was not open at the week-end and in fact restricted the days during the week on which samples might be submitted.

Samples were taken from all the vendors in the district who retailed each week day.

Four additional licenses were issued in 1951 for the sale of ice cream, making seventeen in all. There has been a decided tendency for retailers to stock only wrapped ice cream obtained particularly from the better known manufacturers. Better standards of manufacture under better hygienic conditions were thus established and this was reflected in the results of tests of the samples taken.

Number of samples taken	...	...	...	...	...	...	49
Grade 1 (Excellent)	...	...	...	...	...	...	38
Grade II (Good)	...	...	...	...	...	...	10
Grade III (Poor)	...	...	...	...	...	...	1
Grade IV (Bad)	...	...	...	...	...	...	Nil

These results were a marked improvement upon the previous year when 9 samples were in Grade IV.

Further details will be found in Mr. Graham's Report.

Qualitative Examination of Foods.

The County Council is the Authority for Food and Drugs. Their sampling Officer (Mr. Kewley) assisted by Mr. Graham, took samples in 1951 and Dr. Gawne, County Medical Officer of Health, supplied the following results.

A total of 88 samples was obtained, of these 35 were of milk (this total includes one Channel Island Milk) and the 53 others comprised :—

3 Mince Pies	1 Dried Sage
1 Eccles Cake	2 Fish Paste
3 Arrowroot	1 Barley
1 Sauce	1 Camphorated Oil
1 Tomato Sauce	1 Glycerin and Borax
1 Olive Oil	2 Ice Cream
2 Tincture of Iodine	2 Curry Powder
1 Beef Sausage	3 Salad Cream
2 Flour	2 Dried Peas
1 Baking Powder	2 Pepper, white
2 Custard	2 Semolina
1 Dried Mint	2 Sago
1 Pork Sausage	2 Epsom Salts
3 Candied Peel	1 Castor Oil
1 Jam Puffs	2 Meat Pies
1 Vanilla Slices	1 Eclairs

All the samples were reported by the County Analyst to be genuine with the exception of the following :—

Sample.	Result of Analysis.	Action Taken
1 Tomato Sauce.	Contained 66 parts copper per million parts total solids, i.e., 16 parts per million copper in excess of statutory limit.	Packers cautioned.
1 Tincture of Iodine	Potassium Iodide 0.03 per cent. in excess of maximum B.P. limit.	No action taken.
1 Formal milk.	Deficient of 8.0 per cent. of solids-not-fat and the freezing point indicated the presence of 6.8 per cent extraneous water.	Prosecution. Vendor fined £2 with 6 gns. costs.
1 Ice cream.	Deficient of 38 per cent. minimum percentage of fat.	Prosecution. Vendor fined £2 with 3 gns. costs.
1 Sago.	Consisted of Tapioca.	Vendor communicated with

Condemnation of Food Unfit for Human Consumption.

The amount of food surrendered as unfit for human consumption was 1,331 lbs., consisting of fruit, vegetables, eggs, sausages, and meats of various kinds. The total quantity was a slight increase on that of the previous year.

Water Supply.

As in previous years a report is appended from Mr. Holmes, the Water Engineer, of the year's working of the Water Undertaking.

The bacteriological quality of the water continued to be satisfactory, and the residual Chlorine present in the Supply sufficient for sterilisation purposes and insufficient to cause complaints about the taste and odour.

The Chemical qualities of the water were excellent and action upon lead was found to be absent.

The Authority's supply was supplemented by supplies from the Fylde Water Board and by a small amount from Preston Corporation.

The presence of Fluorine in water as a preventive of the onset of dental caries in school children has come prominently to the fore in recent years. Much investigation has been carried out on this matter in America and in this country. Evidence has accumulated over these last few years so that it can now be assumed that the presence of fluorides in a water supply is beneficial to the teeth up to a standard of 1 part per million, but the actual standard aimed at or to be adopted has not been finally determined. Most upland surface waters have a low content of fluorine only and to bring the supply of Fulwood up to the standard suggested will require probably more than one half part per million. Seasonal tests are to be taken to establish the actual fluorine content.

Although the water was tested in each incident of enteric disease in the district, it was not found to have any bearing upon the etiology of these diseases. In fact in most cases it was found to be sterile.

Sewage and Sewage Control.

The methods of disposal were similar to previous years. The sewered part of the area functioned satisfactorily though with the increased number of houses and the increase in population the sewage plant must be considered to be overloaded, but the effluent did not present any serious problem.

The North side of the district was still unsewered and the overflow from the septic tanks of that area into the streams presented a problem which has increased in magnitude each year. Fortunately 1951 was a wet year, though there were several dry spells but never of long duration, and the resultant stream flow and volume served to remove most of the nuisance.

The beds and banks of these streams were most offensive, particularly in the warmer weather, and at times created a definite public health nuisance.

An enquiry by the Ministry of Health into the question of the sewerage of part of this area was held and evidence was given and areas demonstrated to the Inspector which proved the necessity and indeed urgency of the problem. The making up of certain streets in the area was linked up with this question of sewerage. The Inspector was apparently convinced but the Treasury appear to have deferred the scheme. Not only must the sewerage of this area be considered an urgent matter in the interest of health, but the culverting of these streams in this part of the area, through the built-up parts especially, should be a definite part of the whole plan. In their present condition these streams are nothing less than open sewers.

Rivers and Streams.

The Rivers Board was responsible for the brooks and streams in the district but the local authority also had its responsibilities. The position has been described above of the streams in the North. The other streams, with the exception of the Savick Brook which has a rapid flow and thus more or less cleanses itself, were frequently fouled and frequent inspections were made of their condition.

Closet Accommodation.

The water carriage system was practically universal throughout the district:—

Number of houses supplied with water—3,677.

Number of houses on water carriage system—3,664.

Number of fresh water closets—3,928.

Number of privy middens—4.

Number of pail closets—9.

There were no conversions to water closets in the year. The additional number of houses in 1951 was 45.

Public Cleansing.

There were no changes made in the methods of public cleansing in 1951. Four thousand seven hundred and sixty-five movable ashbins were cleared weekly.

The Engineer and Surveyor was responsible for this service and also for the collection of salvage.

Sanitary Inspections in the District.

In Mr. Graham's appended report details will be found of the inspections made in 1951. This work, of the greatest importance not only to the amenities of the district but to the health and happiness of its inhabitants necessitated 2,734 visits. During these visits 337 defects were discovered of which 309 were conclusively dealt with in the period under review, the remainder had not been completed by the end of the year. It was not necessary to initiate legal proceedings in any of these defects.

It has always been the aim of the department to deal with complaints as soon as they arise, and this policy has yielded fruits in the confidence displayed by the public and by their co-operation in the remedying of defects when their attention has been directed to them.

Housing.

The Authority completed 17 new houses as part of their quota and 21 were erected by private enterprise largely by the transfer of licences from other authorities. Four houses were erected in this district by an adjoining Authority. Three houses were converted to flats.

At the end of the year 8 Council Houses and 33 private houses were in course of erection.

Further meetings with the Planning Authority were held in connection with neighbourhood units and overspill population.

The number of houses inspected for defects was 185, necessitating 593 visits and a quite considerable expenditure of time. Of the five houses upon which demolition orders had been placed in 1950, one was demolished, two were vacant, and the others awaited the provision of alternative accommodation for the inhabitants. 172 houses were found to have defects of which 160 were rendered fit as the result of advice or informal notices and 2 by formal notices. The remainder had not had their repairs completed at the end of the year.

Further details of the defects and the action taken to remedy them can be found in Mr. Graham's Report.

Overcrowding.

Five cases of overcrowding involving 45 persons were relieved during the year; 18 of these persons were rehoused. Eleven new cases were reported in the period.

The number of houses overcrowded at the end of the year was 8 involving 15 families and 56 persons.

Reports upon all cases of overcrowding were made to the Housing Committee for consideration in the allocation of new houses.

Mr. Graham assumed responsibility for all new housing applications and for investigations into the accuracy of the applications. A complete card index system was made of all the applications providing rapidity of inspection at any time and change of circumstances to be noted.

School Accommodation.

The schools still exhibited overcrowded conditions though the additional buildings provided did help to relieve the position. A much needed addition to the Kennington Road School was almost completed by the end of the year.

The new senior school was still uncompleted at the end of 1951.

The further schools contemplated may be delayed.

Factories Act.

There were 26 factories on the register, all of which were inspected during the year and for this purpose 59 visits were made. Suggestions for certain improvements were readily adopted and completed.

Private Streets Works.

The portion of Brackenbury Road in Fulwood was made up and surfaced. Kennington Road, Holmfield Road and Chapel Road were also made up.

Smoke Abatement.

The two chimneys, which had caused so many complaints in past years, still at times emitted smoke of unsatisfactory type in spite of numerous visits and warnings. Frequent observations were made throughout the year and time tests of the smoke character.

Suitable Bye-laws have not yet been adopted and without these sufficient pressure cannot be brought to bear upon the offenders.

Rodent Report.

Mr. Marsh has prepared a report on his work for the year and it is appended.

New Legislation.

Ice Cream (Heat Treatment) Amendment Regulations.
 Ice Cream Food Standards Order.
 Public Health (Leprosy) Regulations.
 Public Health (Puerperal Pyrexia) Regulations.
 Sanitary Officers (Outside London) Regulations.
 Slaughter of Animals (Amendment) Act.
 Rag Flock and Other Filling Materials Act.
 Lancashire County Council (General Powers) Act.
 Pet Animals Act.

Appended Reports.

- (1) Report of Mr. Graham, Sanitary Inspector.
- (2) Report of Mr. Elce, Acting Engineer and Surveyor.
- (3) Report of Mr. Holmes, Water Engineer.
- (4) Report of Mr. Marsh, Rodent Officer.

It would be difficult to pay full justice to the work of Mr. Graham who has performed his duties with tact, skill and devotion to duty. Mrs. Braithwaite though devoting most of her time to the work of the Clerk, kept a watchful eye upon the organisation of the Health Office. Miss Carter has gained in experience, improved in technique, and always given loyal and excellent service. Mr. Marsh has continued his work with his usual quiet efficiency.

In conclusion I desire to express my appreciation of the courtesy, encouragement, and full support extended to me by every member of the Council, and to the co-operation and assistance of all the officials.

I am,

Your obedient Servant,

G. G. WRAY,

Medical Officer of Health.

June, 1952.

SANITARY INSPECTOR'S ANNUAL REPORT — 1951

Mr. Chairman and Members of the Council,

In presenting my report for the year 1951, I have shown the number of visits paid to various types of premises in Fulwood in the interests of environmental public health, the number of such premises visited and the result of notices served or advice given to remedy defects or otherwise improve conditions. Two statutory notices and one hundred and forty eight informal notices were served during the year. No legal action was necessary for enforcement of notices, but in many cases there was delay, due partly to difficulty in obtaining materials for repairs. There were eighteen notices outstanding at the year end as against thirty four in the previous year. Five cases of overcrowding, involving forty five persons, were relieved during the year.

The practical work of Rodent control was efficiently performed by Mr. Marsh. The main statistics required by the Ministry of Agriculture are given in this report and further details in Mr. Marsh's report.

As in previous years fairly detailed information has been given of food supervision in Fulwood.

Details of Sanitary Inspections, 1951.

Type of Premises.					No. of Visits	No. of Premises	No. of Public Health Nuisances and Defects Existing	Abated.
Licensed Slaughter House	...	...	...	...	280	1	2	1
Farms	...	...	...	...	79	57	3	3
Dairies	...	...	...	...	50	10	2	2
Bakehouses	...	...	...	...	43	12	1	1
Other Food Premises	...	...	...	...	165	43	4	3
Factory Act	...	...	...	...	29	26	3	3
Institutions	...	...	...	...	15	7	1	1
Schools	...	...	...	...	4	7	1	1
Shops Act	...	...	...	...	57	43	2	2
Houses—Advisory	...	...	...	...	102	35	18	16
Drainage	...	...	...	...	305	91	90	89
General Defects	...	...	...	...	186	59	64	55
Housing Applications	...	...	...	...	91	87	13	5
Infectious Disease	...	...	...	...	94	72	23	23
Rodent Control	...	...	...	...	1,010	466	86	81
Tips	...	...	...	...	104	4	3	3
Miscellaneous	...	...	...	...	120	63	20	19
Total	...	...	...	...	2,737	1,083	336	308

	Local Authority	Dwelling Houses.	Agricultural.	All other including Business and Industrial	Total.
I. Total number of properties in Local Authority's District	5	3632	63	123	3823
II. Number of properties inspected by the Local Authority during 1951 as a result (a) of notification or (b) otherwise.	(a) Nil (b) 5	60 297	Nil. 43	5 56	65 401
III. Number of properties found to be infested by rats	Major Nil Minor 5	Nil 40	Nil. 21	Nil. 5	Nil. 71
IV. Number of properties found to be seriously infested by mice	Nil	9	Nil.	Nil.	9
V. Number of infested properties treated by Local Authority	5	49	Nil.	6	60
VI. Number of notices served under Section 4: (1) Treatment. (2) Structural Works. (i.e. Proofing)			Nil. Nil.		
VII. Number of cases in which default action was taken by Local Authority following issue of notice under Section 4.			Nil.		
VIII. Legal Proceedings.			Nil.		
IX. Number of "block" control schemes carried out					

Number of Premises.

[illegible]

Premises cleared or disinfested	...	...	...	...	...	...	...	...	4
Rain water fall pipes repaired	...	...	...	...	...	...	...	...	4
Roofs repaired	...	...	...	...	...	...	...	...	9
Sanitary Accommodation improved	...	...	...	...	...	...	...	...	7
Ventilation improved	...	...	...	...	...	...	...	...	4
Woodwork renewed	...	...	...	...	...	...	...	...	11
Sundry Public Health nuisances abated	...	...	...	...	...	...	...	...	19

Food Supervision.

Milk.

As in previous years milk samples have been taken throughout the year and submitted to the Bacteriologist at the Preston Royal Infirmary for examination. Where practicable, portions of samples have also been submitted to the Sediment Test and other simple practical tests at the Public Health Department.

Results seem to indicate that very few samples of milk sold contain visible dirt and the incidence of gross manurial contamination as possibly indicated by the presence of *Bacillus Coli* continues to improve, but judged by the Methylene Blue test, the bacterial quality of samples is rather worse than in the two previous years. This is especially disappointing in view of the increase in the percentage of "Tuberculin tested" milk as compared with previous years.

The Tubercule bacillus was not found in any of the samples submitted for analysis.

The efficiency of pasteurisation of samples tested was much better than in the previous year.

Designation.

Sediment Test for Cleanliness.

	Total.				Passed.				Failed.			
	1948	1949	1950	1951	1948	1949	1950	1951	1948	1949	1950	1951
" T.T."	16	17	31	50	16	17	31	50	Nil.	Nil.	Nil.	Nil.
Accredited	43	39	34	14	43	37	32	14	Nil.	2	2	Nil.
Other samples	184	110	47	34	171	103	41	32	13	7	6	2
TOTAL	243	166	112	98	230	157	104	96	13	9	8	2
PERCENTAGE					95	95	93	98	5	5	7	2

Designation.

Bacillus Coli Test.

	Total.				Passed.				Failed.			
	1948	1949	1950	1951	1948	1949	1950	1951	1948	1949	1950	1951
" T.T."	16	13	68	94	14	10	53	72	2	3	15	22
Accredited	43	33	36	18	39	31	28	10	4	2	8	8
Other samples	184	185	96	88	162	158	76	79	22	27	20	9
TOTAL	243	231	200	200	215	199	157	161	28	32	43	39
PERCENTAGE					88	86	79	80.5	12	14	21	19.5

Designation.

Methylene Blue Test.

	Total.				Passed.				Failed.			
	1948	1949	1950	1951	1948	1949	1950	1951	1948	1949	1950	1951
" T.T."	16	13	68	94	13	11	56	71	3	2	12	23
Accredited	43	33	36	18	33	24	32	12	10	9	4	6
Other samples	184	185	96	88	146	157	81	75	38	28	15	13
TOTAL	243	231	200	200	192	192	169	158	51	39	31	42
PERCENTAGE					79	83	84	79	21	17	16	21

Designation.

Tubercle Bacillus.

	Total.				Passed.				Failed.			
	1948	1949	1950	1951	1948	1949	1950	1951	1948	1949	1950	1951
" T.T."	14	13	57	65	14	13	56	65	Nil.	Nil.	1	Nil.
Accredited	36	33	26	14	36	31	25	14	Nil.	2	1	Nil.
Other samples	159	140	48	34	157	137	45	34	2	3	3	Nil.
TOTAL	209	186	131	113	207	181	126	113	2	5	5	Nil.
PERCENTAGE					99	97	96	100	1	3	4	Nil.

Designation.

Phosphatase Test.

	Total.				Sufficiently.				Insufficiently.			
	1948	1949	1950	1951	1948	1949	1950	1951	1948	1949	1950	1951
Pasteurised	21	30	50	47	21	26	43	46	Nil.	4	7	1

OTHER FOODS.

Horse Meat

There is one slaughter-house licensed by the Local Authority for the slaughter of horses for human consumption. This has been visited daily throughout the year on occasions when horses have been slaughtered; the carcasses of 318 horses have been inspected and have been passed as fit for human consumption, with the exception of 2 carcasses and offal. 67 livers, 2 heads and 58 lbs of meat.

With constant supervision, conditions have been reasonably satisfactory.

Pigs.

A number of pigs slaughtered privately and not for sale have been inspected by arrangement with the owners, as in previous years, and any meat found unfit for human consumption has been voluntarily surrendered.

Bakehouses and Restaurant Kitchens.

Ice Cream.

Vegetables—											lbs.
Carrots	...	...	...	...	...	...	...	...	...	...	728
Tomatoes	...	...	...	...	...	...	...	...	...	...	72
											800 lbs.

Proteins—											lbs.
Eggs	..	...	...	...	...	...	...	..	...	...	45
Fish	...	...	...	...	...	...	...	..	...	...	182
											<hr/> 227 lbs.
Bottled or canned food—											lbs.
Beans	...	...	...	...	...	...	...	...	...	...	2
Fruit	...	...	...	...	...	...	...	...	...	...	44
Meat	..	...	...	...	...	...	...	...	...	...	8
Milk	...	...	...	...	...	...	...	...	...	...	3
Tomatoes	...	...	...	...	...	...	...	...	...	...	15
											<hr/> 72 lbs.

It is perhaps unfortunate that statistics play such a large part in this report, but the general conclusion to be drawn from these figures is that so far as the sale and preparation of food is concerned, the aim has been to maintain close co-operation between the food handler and this department, to the ultimate benefit of the consumer. The results of survey and sampling indicate that this is being done with a fair degree of success.

Housing inspections and the percentage of houses found to be "Not in all respects fit," but rendered reasonably fit during the year, are both fairly high again. Planning experts, reading and interpreting these figures for Fulwood for previous years quite wrongly, have drawn the conclusion that "Of the Authorities in the Preston sub-region the highest proportion of unfit houses was in the Fulwood Urban District." The actual facts are that with the co-operation of owners of property, a larger proportion of houses which were "Not in all respects fit" have been made fit.

In conclusion I should like to express to the Chairman and Members of the Council my appreciation of their support during the year. I desire also to thank the Medical Officer of Health for his unfailing support and guidance and my colleagues for their generous co-operation at all times.

Yours faithfully,

R. GRAHAM,

June, 1952.

Sanitary Inspector.

REPORT OF MR. ELCE, ACTING SURVEYOR

Council Offices.

A strong room was built at the rear of the office buildings and a new brick store was erected for highway tools. The scullery and kitchen were decorated and the stone flag floors covered with asphalt.

A car park was provided in the grounds of Larch House. The front garden wall was pointed and strengthened with new buttresses and new entrance gates were fixed.

Gardens.

These were maintained and planted as in previous years.

A Christmas tree was erected in the rest garden at the Watling Street Road—Garstang Road junction, and suitably decorated with fairy lights. Carol services were held and were well attended.

Public Lighting.

The whole of the sodium lamps in Watling Street Road and Deepdale Road were in lighting by March 1951. Other small schemes completed included the lighting of the housing site at Watling Street Road with 80-watt fluorescent mercury lamps and the conversion of two gas lamps to electric lighting and the provision of two red bulk-head fittings at the railway arch, Lytham Road. The gas lighting in Sharoe Green Lane, between Watling Street Road and the entrance to the Sharoe Green Hospital was improved by the provision of additional columns and improved types of lanterns, and the lighting was extended from midnight until the early morning hours.

Armoured plate glass was used for the first time in those gas lanterns sited in areas where breakages of glass had been high, and proved very effective indeed against stone throwing.

Group "A" schemes of lighting for Black Bull Lane and Watling Street Road from the Barracks to Cromwell Road, were submitted to the Ministry of Transport, but were disapproved. In consequence a conversion scheme for Black Bull Lane and a new scheme for Watling Street Road, both for Group "B" lighting were designed.

Private Street Works.

Private Street Works in Kennington Road, Holmfield Road and Chapel Road were started and completed during the year, and in addition work was started in Brackenbury Road.

Edenway, Brookside Road, York Avenue, Withy Parade and Empress Avenue which had been completed during the previous year, were adopted by the Council.

Works to the value of £7,526 were carried out during the year.

A scheme for making-up Parklands Drive, Parklands Grove and Hillcrest Avenue, was submitted to the Ministry of Housing and Local Government, together with a surface water sewerage scheme in Garstang Road which was eventually to form part of the Broughton Sewerage Scheme. The proposals were approved in principle by the Ministry, but no starting date was forthcoming during the year. This is due to the restriction of the Capital Investment Programme by the Government.

Highways.

The surfacing of the sett-paved carriageway in Deepdale Road with Hot Rolled Asphalt and pre-coated chippings, and the relaying of kerbs and the re-surfacing of the footway on the west side were completed during the year.

In addition to the usual maintenance works on classified and district roads, two improvements were carried out on classified roads. The first was the superelevation of the sharp bend adjacent to the entrance to the new school site in Black Bull Lane. The second was the provision of a 9-inch surface water sewer in Lightfoot Lane between Walker Lane and Lightfoot House, and the widening of the carriageway and strengthening of the haunches.

The tarspraying season was good and some 32,200 square yards of carriageway and footway were tarsprayed.

The south side of Lightfoot Lane was numbered, and a confused system of numbering and naming of streets in the Beechwood Avenue area was corrected, with the re-numbering of Fir Tree Avenue and Beechwood Avenue (western portion), and the re-numbering and re-naming as Rossall Drive, of the eastern portion of Beechwood Avenue.

Towards the latter part of the year appeared the "Zebra" crossings. The crossings in Black Bull Lane and Lytham Road, being the only three under the control of the Council, did not meet with the requirements essential for "Zebra" crossings, and in consequence were removed. Of six crossings originally sited in Garstang Road A.6., and maintained by the County Council two were retained and striped.

Sewerage.

During the year the preparation of plans and estimates of cost of the sewerage scheme for the Broughton part of Fulwood so far as the outfall sewers were concerned, was completed. The scheme was submitted to the Ministry of Housing and Local Government and the Lancashire River Board for approval and consent to the proposals was received from the Board. The Council also agreed in principle to take part in a Joint Sewerage Scheme along with Preston Corporation and Preston R.D.C., the effect of which would be that the Council's Sewerage Works would become redundant and all sewage from the area would be pumped for treatment to the Corporation's Sewage Disposal Works at Freckleton, if and when the several authorities concerned reach agreement on the engineering and financial aspects of the scheme.

The outcome of the submission of the Council's scheme to the Ministry was that the Ministry will await the submission of the Joint Scheme before holding an Inquiry and giving a decision.

In an effort to expedite the making-up of private streets in the "Parklands" area a surface water sewerage scheme, involving the laying of a sewer in Garstang Road, was prepared and submitted to the Ministry. This scheme was so designed to form part of the major proposals for the area. An inquiry was held and approval given, but no starting date was granted for the works as stated above.

In order to relieve the flooding which had occurred fairly frequently during times of storm in the Watling Street Road area a Storm Water Overflow Manhole and Relief Sewer was constructed near the Barracks Post Office discharging to Eaves Brook. The manhole was so designed that any flow in the sewers in excess of six times dry weather flow was discharged to the brook. Although there have been no particularly heavy storms since the construction of the overflow manhole there has been no further evidence of surcharge in the sewers and it appears that flooding in this area has been eliminated.

A new sewer 176 yards in length, was constructed in Sharoe Green Lane, interconnecting the head of the existing 9-inch sewer and the septic tank effluent pipes from Sharoe Mount Avenue, which after crossing the intervening fields discharged into the ditch by the side of the road.

A survey of the sewers throughout the district, although not yet completed, has provided sufficient information to enable a comprehensive scheme of storm relief works to be prepared, and these will be carried out during the coming year.

Sewage Works.

The works operated satisfactorily throughout the year and the tanks were cleaned out as follows:—

Detritus tanks	...	...	...	...	...	...	...	94
Settling tanks	...	...	...	...	...	...	...	17
Humus tanks	...	...	...	...	...	...	...	61

A crop of 22½ tons of mangolds were grown on that part of the sludge drying area which is used for the treatment of storm water and these were sold for £56.

Refuse Collection and Salvage.

A weekly collection of household refuse was maintained throughout the year.

Disposal continued to be carried out by means of controlled tipping. Three pits in Longsands Lane were filled and the land reclaimed for agricultural purposes.

The following tonnage of materials were salvaged during the year:—

							Tons.	Cwts.	Revenue.
Paper	...	...	...	...	...	...	171		£2,354
Rags	...	...	...	...	...	...	4	13	£130
Ferrous Metals	...	...	...	...	...	...	31	4	£83
Non-ferrous Metals	...	...	...	...	...	...	1	1	£23
Waterworks Scrap	...	...	...	...	...	...	3		£14
Kitchen Waste	...	...	...	...	...	...	140		£407
Total							352	18	£3,011

The Waste Paper Recovery Association were the organisers of a national salvage competition covering the collection of waste paper during the whole of the year. Prizes to the value of £20,000 were to be presented to those authorities who obtained the best tonnage figures per 1,000 population. This Authority has gained a £50 prize. Some 900 local authorities entered the competition of which 176 gained prizes and this authority was placed 128th on the list, in that section where the tonnage of paper collected per month per 1,000 population amounted to an average lying between 1.307 and 1.028 tons.

During the year, the collection of tins and scrap metals once more became a matter of importance as during the war years. Salvaged tins are sold to Preston Corporation, and other scrap metals to dealers.

Housing.

At the beginning of the year 13 houses were under construction by private enterprise, and 6 by the Council, and during the year a further 28 houses by private enterprise and 12 by the Council were started.

During the year 19 houses were completed by private enterprise making a total of 116 houses, completed since 1944. 8 houses were completed by the Council, making a total of 72 Council houses erected since 1946 when the Council's housing programme was started.

Of the 8 completed by the Council 4 houses were constructed at Fulwood Row for agricultural workers and the remainder were erected on the Watling Street Road site.

Site works at Fulwood Row comprising sewers, roadway and septic tank were completed.

The number of houses erected or in course of erection by private enterprise was retained during the year at a fairly high level by the transfer of 18 licences from the County Borough of Preston.

During the year the exteriors of twelve houses in Beech Drive, twelve in Thornton Avenue and six in Lythcoe Avenue, were painted.

By the end of the year arrangements had finally been agreed with the Ministry of Housing and Local Government whereby twelve houses were to be erected by the Kingsway Housing Association for the housing of key workers employed at the English Electric Co. Limited. These houses are being erected on a site on the north side of Watling Street Road.

With the Watling Street Road Housing Site almost completed it was necessary to find more land for housing and negotiations were completed for the purchase of plots of land in Beech Street, Lulworth Road and Lythcoe Avenue, where it will be possible to erect 24 houses and 2 flats.

TOM ELCE,

Acting Engineer and Surveyor.

REPORT OF MR. HOLMES, WATER ENGINEER

Mr. Chairman and Members of the Council,

Water Supply, 1951.

I have pleasure in submitting to you my Annual Report for the year ending December 31st, 1951.

Area Supplied.

The Statutory Area of Supply covers the Urban District of Fulwood, the parishes of Broughton, Goosnargh, Houghton, Whittingham, part of the parishes of Grimsargh and Lea, in the parish of Lea, Ashton, Ingol and Cottam, comprising in all an area of approximately 30 square miles.

The total number of premises supplied was 4,738 of which 3,652 are within the Urban District, the remaining 1,086 being in the Rural Areas.

Included in the above-mentioned total are 101 metered supplies.

Weather and Rainfall.

The year generally was mild with a rainfall above the average. A comparison of the amounts recorded at the Council's two stations with the previous year's readings and a long period average is set out below :—

	Height above sea level in feet	Average of 12 yrs.	1950.	1951.
Barnsfold	508.37	... 47.37 inches	... 57.32	... 56.28 inches
Houghton	264.00	... 41.02 inches	... 49.84	... 46.88 inches

The wettest month at Barnsfold was December when 10.88 inches of rain fell—this was the highest monthly total recorded since 1904. November with 9.11 inches was the next highest, bringing the total to 19.9 inches for the two months, during which period rainfall was recorded on 56 out of 61 days. The heaviest day's fall of the year was 1.76 inches on December 24th.

Quantity Supplied.

The total quantity of water supplied to the distribution area during the year amounted to 358,269,000 gallons which is equivalent to a consumption of 981,000 gallons per day. This was a reduction 0.2% over last year's daily average of 983,000 gallons which was the highest ever attained.

The maximum daily flow recorded at Barnsfold Reservoirs occurred on November 30th, and amounted to 1,162,000 gallons.

The minimum quantity in storage was 33.6 million gallons on October 20th as against 40.3 million gallons in the previous year.

Treatment and Quality.

All waters entering the reservoirs from the two gathering grounds on Beacon and Saddle Fells were subjected to a continuous chloramine treatment by means of manually controlled Wallace and Tiernan instruments, the dose being regulated to ensure as far as possible a chlorine residual of 0.6 parts per million at the inlet cills.

Immediately downstream of the reservoirs the water going into supply was given a further dose of chloramine by means of instruments automatically controlled from a venturi tube to inject a dose proportional to the flow passing at any time. A dose varying from 0.1 to 0.2 parts per million generally ensured a small chlorine residual throughout the distribution system. In both instances the ratio of chlorine to ammonia was 4 to 1. Tests to determine this residual were carried out daily. In addition the chlorine residual, pH and Hazen values of the water as delivered to the consumers were determined at regular intervals from samples taken from various parts of the district.

On notification that, during the winter months, there was a possibility that the electricity supply may be shut off for one morning each week, the manually controlled portable chlorinator was installed at the reservoir outlet to enable the chlorination process to be continued (using a dry gas feed) during "power cut" periods.

Fifteen samples for bacteriological analysis by the Council's Consultant Analyst, Mr. S. E. Melling, M.Sc., F.R.I.C., were taken from the reservoirs after treatment and from various consumer's premises. The results were as follows:—

- B. Coli absent in 100 c.c.s—13 samples.
- 8 B. Coli present in 100 c.c.s—1 sample. Ref. No. 252.
- 1 B. Coli present in 100 c.c.s—1 sample. Ref. No. 255.

The Analyst's remarks with regard to these two samples were:—

" but the B. Coli result of 252 was so exceptional and contrary to what one expected that, within four days, I again visited this farm and took the precaution to flame the tap and fittings before drawing off the bacteriological sample—Probable number of B. Coli per 100 c.c.s—nil—the most probable explanation of the previous unsatisfactory result is that it was due to air-borne contamination by dust from the adjacent farm yard or other external untraceable source."

No. 255—" The fact that an ephemeral reacting coliform organism—even though confirmed as faecal—was present in only one out of five 10 c.c. tubes, the 50 c.c. volume and all remaining tubes being negative, is of little, if any, significance and on this score I certainly refuse to certify against its potable fitness."

Two chemical analyses were made during the year.

In addition a number of samples from the reservoirs were submitted for analysis and all were considered satisfactory.

Typical chemical and bacteriological analyses are set out at the end of the Report.

Distribution and Maintenance.

Under this heading the following summary gives an indication of the work undertaken:—

- No. of Inspections at consumer's premises—708.
- No. of stopcocks cleaned—40.
- No. of sieves cleaned—289.
- No. of mains fittings (valve, hydrants, etc.) repaired—73.
- No. of mains flushed—721.
- No. of service leakages repaired—129.
- No. of service connections made to the mains—65.
- No. of fittings re-washed—1,780.
- No. of burst mains repaired—7.

In addition 90 yards of 2-inch asbestos cement main was laid to improve the supply of Kelly's Row and small mains extensions were carried out in Laurel Bank Avenue and Hazelmere Road to meet new housing requirements.

A bypass linking the 7-inch and 12-inch mains was put in near Deepdale Road to obviate the necessity of "feeding back" in times of emergency.

140 yards of 2-inch main to Bank Hall area and 600 yards of 3-inch main in Walker Lane and Lightfoot Lane were cleaned with a hand-operated scraping machine.

TYPICAL DETAILED ANALYSIS.

Sample taken at "Friarmere," Watling Street Road, on June 3rd, 1951, Ref. No. 255.

Analytical Returns.										Expressed in parts per 100,000.	
Total solids dried at 103°C	...	...	...	...	...	...	...	...	...	8.5	
Total hardness	...	...	...	...	...	...	...	...	...	4.1	
Temporary hardness	...	...	...	...	...	...	...	...	...	2.0	
Permanent hardness	...	...	...	...	...	...	...	...	...	2.1	
Combined chlorine	...	...	...	...	...	...	...	...	...	1.2	
Toxic metals (lead, etc.)	...	...	...	...	...	...	...	...	...	nil.	
Ammoniacol nitrogen	...	...	...	...	...	...	...	...	...	0.002	
Albuminoid nitrogen	...	...	...	...	...	...	...	...	...	0.014	
Nitrous nitrogen (nitrites)	...	...	...	...	...	...	...	...	...	nil.	
Nitric nitrogen (nitrates)	...	...	...	...	...	...	...	...	...	0.06	
Oxygen absorbed in 4 hours at 26.7°C	...	...	...	...	...	...	...	...	...	0.174	
Hazen number	...	...	...	...	...	...	...	...	...	30	
pH	...	...	...	...	...	...	...	...	...	7.2	
Free (residual chlorine)	...	...	...	...	...	...	...	...	...	0.04 p.p.m.	

BACTERIOLOGICAL ANALYSES.

Samples taken—

March 8th, 1951.

November 12th, 1951.

"B" Coli aerogenesin both cases the coliform organism was absent in the full range of tubes put up.

Probable number (per 100 c.c.) 0. 0.

Upon incubationNo. of colonies developing on yeastrel agar per c.c.

2 days at 37°C 1. 0.

NORMAN HOLMES, A.M.I.C.E., A.M.I. Mun.E.,

Waterworks Engineer.

RODENT REPORT, 1951.

Mr. Chairman and Members of the Council,

During the year 1951, sixty-five complaints of rodent infestation were received from occupiers of premises, and eleven infestations were found during survey. Sixty-four treatments were made. Fifty-five for rat infestation and nine for mice. Poison treatment resulted in an estimated kill of two hundred and eighteen rats. One hundred and one bodies were found. Thirty seven rats were killed by traps and sixty-three mice were also killed by traps. During survey four hundred and sixty-six properties were visited, sixty-five after notification and four hundred and one visited for inspection.

The Council's refuse tips were given periodical treatments, also the Council's sewage works at Cottam. Test baiting and Maintenance treatment of sewers were also done. Results showed only slight infestation. Private tips and waste land were frequently visited. Farms and business premises were also visited during survey.

Poisons used in treatments were:—Arsenic, Red Squill and Zinc Phosphide.

Where infestation was due to defects in property, advice was given and after inspection by the Sanitary Inspector (Mr. Graham) properties were made rat proof.

Co-operation by occupiers was generally good.

Thanking you for your trust and confidence.

, Yours sincerely,

JOHN J. MARSH.

